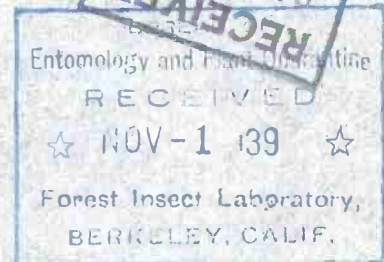


646.
23071

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
SEQUOIA NATIONAL PARK
SEQUOIA NATIONAL PARK, CALIF.

October 30, 1939

ANNUAL FOREST INSECT REPORT
Sequoia National Park
1939



Official assignment as Acting Park Forester has not as yet been received, but I have been informed that I am responsible for the submission of the Annual Insect Control Report.

It is impossible to submit a report of value unless one is able to spend considerable on actual survey work, and this I have been unable to do. However, as Wildlife Ranger, I have covered most of the park this past summer, and during my wanderings I have made general observations of forest conditions. One can readily see, though, that general observations have no scientific value; only through the definite establishment of sample plots which can be cruised every year, and by making semi-annual topographic surveys from established observation points, can one definitely know whether there is an increase or decrease in insect infestations from year to year.

I Unit surveyed

A. Park as a unit

II Date of field survey

No definite date for field surveys. General observations occurred from August to present date

III Method

A. General observation

IV General situation in the unit surveyed

Throughout the park the infestation appears normal. An occasional infested tree is observed among the sugar pine, ponderosa pine, lodgepole and jeffrey pines. The sugar and lodgepole pines are attacked by the Mountain Pine Beetle (*Dendroctonus monticolae* Hopk.), the ponderosa pine by the Western Pine Beetle (*Dendroctonus brevicornis* Hopk.) and the jeffrey pine by the Jeffrey Pine Beetle (*Dendroctonus jeffreyi* Hopk.).

Lodgepole pine trees in a small basin west of Rockslide Lake on the Kern-Kaweah River have been attacked by the Needle Miner (*Recurvaria milleri* Busck.). I would say that the trees have been about half defoliated. A half-hour investigation failed to show that an active infestation was in

progress, although if the moths fly in alternate years as in Yosemite, the larvae in the green needles would be very minute at this time and thus difficult to detect. Very few mature dead trees could be found, indicating that the infestation is or was light. The usual associate of the Needle Miner, the Mountain Pine Beetle, was not observed. Area of infestation is about 40 acres.

There is a very light Needle Miner infestation in lodgepole pine at Mineral King, outside the park, but this has been known for many years. Other areas of infestation no doubt exist in the park, but none has come to my attention.

Mr. S. T. Carlson, representative from the Bureau of Entomology, recommends control action for portions of the Marble Fork-Yucca Creek unit, the Colony Mill-Crystal Cave area, Moro Rock, Marble Fork, Silliman Creek, and Halstead Creek areas. Before I can make any comments on these recommendations, personal observations will have to be made, but these areas are in and adjacent to units of high use and for this reason should be continually treated.

V Special situations

To my knowledge none exists at the present time

Insect control projects accomplished during the year: None.

Future recommendations:

1. There should be continuous control work in areas of high use, such as roads, campgrounds, picnic areas and other developed areas.

2. There should be a spring and fall survey of insect conditions, this survey to be continued along lines adopted by Dr. De Leon in his "Report on the 1933 Losses of Sugar Pine and Ponderosa Pine in the Sequoia National Park". Also, there should be sample plots established in type areas such as exist now in the East Fork of the Kaweah and at Hockett Meadows.

Respectfully submitted,

W. B. Augustine,
Wildlife Ranger.

cc. Director, Attn. Chf. Forester
Entom. Field Representative,
Bur. Entomology & Plant Quarantine.

*Bureau
has one
160-Acre
plot here*

United STATES
DEPARTMENT OF THE INTERIOR
National Park Service
Washington

1939 Annual Forest Insect Report

SEQUOIA NATIONAL PARK

Name of Plant species attacked	Name of attacking insect	Infestation				Opening and closing dates for control	Control			Estimated total cost next year
		Location	Extent	Damage	Status		Last Year	Treatment This Year	Next Year	
1	2	3	4	5	6	7	8	9	10	11
Sugar Pine (<i>Pinus lambertiana</i>)	Mt. Pine Beetle (<i>D. monticolae</i> type west- ern part of park.	General throughout	Few scattered trees.	Individuals dying to dead.	Old-slight increase over last year.	None	None	None	None, camps are high use	\$500.0
Ponderosa Pine (<i>Pinus ponderosa</i>)	Western Pine Beetle (<i>D. brevicornis</i>)	Same	Same	Same	Same	"	"	"	Same	\$300.0
Jeffrey Pine (<i>Pinus jeffreyi</i>)	Jeffrey Pine Beetle	Same	Same	Same	Same	"	"	"	Same	\$200.0
Lodgepole Pine (<i>Pinus contorta</i>)	Mt. Pine Beetle (<i>D. monticolae</i>) all of park	General throughout	Same	Same	Old-remain- ed same.	None	None	None	None	\$00.0
	Needle Miner (<i>Agathis mulleri</i>)	Same	40 acres	Few dead trees	Old-remained same	None	None	None	None	

Date or period of survey: no definite dateSubmitted by: H. E. AugustineUnit of survey: park at largeTitle: Wildlife RangerDate: October 30, 1939.Method of survey: General observations

NOTE: Costs based on CCC labor at \$1.50 per day per man.